



# VICTORIAN PURCHASING GUIDE

UEE ELECTROTECHNOLOGY  
TRAINING PACKAGE RELEASE 5.0

FEBRUARY 2023

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# VICTORIAN PURCHASING GUIDE – RELEASE HISTORY

Note: RTOs should refer to the [National Register](#) for the detail of changes in each Release.

Training Package Release	Date VPG Approved	Comments
Release 5.0	14 February 2023	<p>This purchasing guide for Release 5.0 contains five (5) not equivalent qualifications:</p> <ul style="list-style-type: none"><li>• UEE43322 Certificate IV in Electrical - Renewable Energy</li><li>• UEE50122 Diploma of Computer Systems Engineering</li><li>• UEE50722 Diploma of Renewable Energy Engineering</li><li>• UEE60922 Advanced Diploma of Renewable Energy Engineering</li><li>• UEE62022 Advanced Diploma of Engineering Technology - Renewable Energy</li></ul> <p>There are thirteen (13) new Units of Competency (UoCs) and twenty-four (24) revised UoCs deemed not equivalent. There are two (2) UoCs which been revised and deemed equivalent:</p> <ul style="list-style-type: none"><li>• UEEEL0078 Install and commission whole current electricity meters</li><li>• UEERE0088 Work safely with remote area power supply systems.</li></ul>
Release 4.0	20 January 2023	<p>This release corrects a typographical error for UEE30220 Certificate III in Computer Systems Equipment, reflecting no intentional change in maximum payable hours from release 3.0.</p>
Release 4.0	28 December 2022	<p>This purchasing guide for Release 4.0 contains three (3) not equivalent qualifications:</p> <ul style="list-style-type: none"><li>• UEE42622 Certificate IV in Hazardous areas - Electrical</li><li>• UEE61222 Advanced Diploma of Engineering - Explosion protection</li><li>• UEE62122 Advanced Diploma of Engineering Technology – Electrical</li></ul> <p>There are sixteen (16) new Units of Competency (UoCs) and two (2) revised UoCs deemed not equivalent. Fourteen (14) revised UoCs with code changes and other updates are deemed equivalent.</p> <p>In addition, a correction to the maximum payable hours for UEE32220 Certificate III in Air Conditioning and Refrigeration has been included in this purchasing guide.</p>
Release 3.0	14 December 2021	<p>This purchasing guide reflects Release 3.0 and contains:</p> <ul style="list-style-type: none"><li>• One (1) new qualification</li><li>• Six (6) new units of competency</li><li>• Twenty-four (24) revised qualifications</li><li>• Ten amended units of competency</li><li>• One deleted units of competency</li></ul> <p>Note that in addition, MPH have been amended for;</p> <p>UEE22020 Certificate II in Electrotechnology (Career Start) and UEE31420 Certificate III in Security Equipment</p>

Training Package Release	Date VPG Approved	Comments
Release 2.0	25 May 2021	This is the second release of this Training Package. Release 2.0 contains: <ul style="list-style-type: none"> <li>• Seventy-nine (79) qualifications</li> <li>• Thirty-six (36) new units of competency</li> <li>• Four hundred and ninety-four (494) revised units of competency</li> </ul>
Release 1.0	18 May 2017	Initial Release of the UEE Electrotechnology Training Package This Release incorporates 2 Units of Competency



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## INTRODUCTION

### What is a Victorian Purchasing Guide?

The Victorian Purchasing Guide provides information for use by Registered Training Organisations (RTOs) in the provision of Victorian government subsidised training.

Specifically, the Victorian Purchasing Guide provides the following information related to the delivery of nationally endorsed Training Packages in Victoria:

- The maximum and minimum payable hours available for each qualification.
- Nominal hours for each unit of competency within the Training Package.

### Registration

RTOs must be registered by either the Victorian Registration and Qualifications Authority (VRQA) or the Australian Skills Qualification Authority (ASQA) regulatory body to be eligible to issue qualifications and Statements of Attainment under the Australian Qualifications Framework (AQF).

The VRQA is the regulatory authority in Victoria responsible for the registration of Vocational Education and Training (VET) providers who offer courses to domestic students in Victoria only.

ASQA is the regulatory authority responsible for the registration of VET providers who offer training in Victoria, nationally and / or internationally.

### Transition

The relationship between new units and any superseded or replaced units from the previous version of UEE Electrotechnology Training Package Release 5.0 is provided in the Training Package Companion Volume Implementation Guide. (See [VETnet.gov.au](http://VETnet.gov.au) for more information).

Information regarding transition arrangements can be obtained from the state or national VET Regulatory Authority (see Contacts and Links section).

RTOs must ensure that all training and assessment leading to issuance of qualifications or Statements of Attainment from the UEE Electrotechnology Training Package Release 5.0 is conducted against the Training Package units of competency and complies with the assessment requirements.

## QUALIFICATIONS

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE10120	Certificate I in ElectroComms Skills	209	220
UEE20120	Certificate II in Split Air Conditioning and Heat Pump Systems	361	380
UEE20520	Certificate II in Computer Assembly and Repair	342	360
UEE20720	Certificate II in Data and Voice Communications	428	450
UEE20920	Certificate II in Electronic Assembly	342	360
UEE21020	Certificate II in Fire Alarms Servicing	342	360
UEE21220	Certificate II in Antennae Equipment	342	360
UEE21420	Certificate II in Remote Area Power Supply Maintenance	342	360
UEE21620	Certificate II in Security Assembly and Set-up	342	360
UEE21720	Certificate II in Technical Support	342	360
UEE21920	Certificate II in Electronics	342	360
UEE22020	Certificate II in Electrotechnology (Career Start)	418	440
UEE22120	Certificate II in Sustainable Energy (Career Start)	399	420
UEE30120	Certificate III in Business Equipment	969	1020
UEE30220	Certificate III in Computer Systems Equipment	969	1020
UEE30320	Certificate III in Custom Electronics Installations	969	1020
UEE30420	Certificate III in Data and Voice Communications	1036	1090
UEE30620	Certificate III in Electrical Machine Repair	1045	1100
UEE30720	Certificate III in Switchgear and Controlgear	1074	1130
UEE30820	Certificate III in Electrotechnology Electrician	1112	1170
UEE30920	Certificate III in Electronics and Communications	969	1020
UEE31020	Certificate III in Fire Protection Control	1002	1055
UEE31220	Certificate III in Instrumentation and Control	969	1020
UEE31420	Certificate III in Security Equipment	1055	1110
UEE32120	Certificate III in Appliance Service	1036	1090

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE32220	Certificate III in Air Conditioning and Refrigeration	1197	1260
UEE33020	Certificate III in Electrical Fitting	1102	1160
UEE40120	Certificate IV in Computer Systems	1216	1280
UEE40220	Certificate IV in Electrical - Data and Voice Communications	475	500
UEE40320	Certificate IV in Installation Inspection and Audits	532	560
UEE40420	Certificate IV in Electrical - Instrumentation	475	500
UEE40520	Certificate IV in Electrical - Air Conditioning Split Systems	485	510
UEE40620	Certificate IV in Electrotechnology - Systems Electrician	665	700
UEE40720	Certificate IV in Electronics and Communications	1216	1280
UEE40820	Certificate IV in Electrical - Fire Protection Control Systems	475	500
UEE40920	Certificate IV in Industrial Electronics and Control	484	520
UEE41020	Certificate IV in Energy Management and Control	589	620
UEE41120	Certificate IV in Electrical - Lift Systems	437	460
UEE41220	Certificate IV in Electrical – Rail Signalling	333	350
UEE41520	Certificate IV in Video and Audio Systems	1216	1280
UEE41720	Certificate IV in Rail - Communications and Network Systems	1216	1280
UEE42120	Certificate IV in Electrotechnology - Electrical Contracting	513	540
UEE42220	Certificate IV in Instrumentation and Control	1216	1280
UEE42622	Certificate IV in Hazardous areas - Electrical	475	500
UEE42720	Certificate IV in Air Conditioning and Refrigeration Servicing	1292	1360
UEE42820	Certificate IV in Air-conditioning Systems Energy Management and Control	1330	1400
UEE42920	Certificate IV in Refrigeration and Air Conditioning Systems	1311	1380
UEE43020	Certificate IV in Electrical Equipment and Systems	703	740
UEE43220	Certificate IV in Industrial Automation and Control	1235	1300



Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE43322	Certificate IV in Electrical - Renewable Energy	637	670
UEE50122	Diploma of Computer Systems Engineering	1672	1760
UEE50220	Diploma of Electrical and Instrumentation	988	1040
UEE50320	Diploma of Electrical and Refrigeration and Air Conditioning	1834	1930
UEE50420	Diploma of Electrical Engineering	893	940
UEE50520	Diploma of Electronics and Communications Engineering	1520	1600
UEE50722	Diploma of Renewable Energy Engineering	1045	1100
UEE50920	Diploma of Industrial Electronics and Control Engineering	798	840
UEE51020	Diploma of Instrumentation and Control Engineering	1520	1600
UEE51120	Diploma of Engineering Technology - Refrigeration and Air Conditioning	1486	1564
UEE51220	Diploma of Air Conditioning and Refrigeration Engineering	1596	1680
UEE53020	Diploma of Electrical Systems Engineering	893	940
UEE60220	Advanced Diploma of Electronics and Communications Engineering	2052	2160
UEE60620	Advanced Diploma of Industrial Electronics and Control Engineering	1216	1280
UEE60922	Advanced Diploma of Renewable Energy Engineering	1587	1670
UEE61222	Advanced Diploma of Engineering - Explosion protection	1254	1320
UEE61521	Advanced Diploma of Instrumentation and Control Engineering	1957	2060
UEE61720	Advanced Diploma of Engineering Technology – Electronics	2014	2120
UEE62022	Advanced Diploma of Engineering Technology - Renewable Energy	2375	2500
UEE62122	Advanced Diploma of Engineering Technology - Electrical	2451	2580
UEE62220	Advanced Diploma of Electrical - Engineering	1349	1420
UEE62320	Advanced Diploma of Electrical Engineering - Coal Mining	1197	1260
UEE62420	Advanced Diploma of Engineering Technology - Air Conditioning and Refrigeration	1986	2090

Code	Title	Minimum Payable Hours	Maximum Payable Hours
UEE62520	Advanced Diploma of Air Conditioning and Refrigeration Engineering	2052	2160
UEE63020	Advanced Diploma of Electrical Systems Engineering	1425	1500

## UNITS OF COMPETENCY AND NOMINAL HOURS

Unit Code	Unit Title	Nominal Hours
UEEAS0001	Assemble electronic components	40
UEEAS0002	Conduct quality and functional tests on assembled electronic apparatus	20
UEEAS0003	Modify electronic sub-assemblies	40
UEEAS0004	Select electronic components for assembly	20
UEEAS0005	Set up and check electronic component assembly machines	40
UEEAS0006	Use lead-free soldering techniques	40
UEEAS0007	Assemble, mount and connect control gear and switchgear	120
UEEAS0008	Fabricate and assemble bus bars	60
UEEAS0009	Mount and wire control panel equipment	60
UEECD0001	Analyse materials for suitability in electrical equipment	80
UEECD0002	Analyse static and dynamic parameters of electrical equipment	80
UEECD0003	Apply industry and community standards to engineering activities	20
UEECD0004	Apply material science to solving electrotechnology engineering problems	60
UEECD0005	Apply physics to solving electrotechnology engineering problems	60
UEECD0006	Apply technologies and concepts to energy sector work activities	120
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace	20
UEECD0008	Carry out preparatory energy sector work activities	60
UEECD0009	Carry out routine work activities in an energy sector environment	40
UEECD0010	Compile and produce an energy sector detailed report	60
UEECD0011	Comply with scheduled and preventative maintenance program processes	20
UEECD0012	Contribute to risk management in electrotechnology systems	20

Unit Code	Unit Title	Nominal Hours
UEECD0013	Develop and implement energy sector maintenance programs	60
UEECD0014	Develop design briefs for electrotechnology projects	40
UEECD0015	Develop engineering solutions to photonic system problems	80
UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work	20
UEECD0017	Establish and follow a competency development plan in an electrotechnology engineering discipline	20
UEECD0018	Establish, maintain and evaluate energy sector WHS/OHS systems	60
UEECD0019	Fabricate, assemble and dismantle utilities industry components	40
UEECD0020	Fix and secure electrotechnology equipment	20
UEECD0021	Identify and select components, accessories and materials for energy sector work activities	20
UEECD0022	Identify building techniques, methods and materials used in energy sector work activities	60
UEECD0023	Identify effects of energy on machinery and materials in an energy sector environment	120
UEECD0024	Implement and monitor energy sector WHS policies and procedures	20
UEECD0025	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits	40
UEECD0026	Manage risk in electrotechnology activities	60
UEECD0027	Participate in development and follow a personal competency development plan	20
UEECD0028	Plan an integrated cabling installation system	40
UEECD0029	Plan electrotechnology projects	60
UEECD0030	Prepare electrotechnology/utilities drawings using manual drafting and CAD equipment and software	60
UEECD0031	Prepare engineering drawings using manual drafting and CAD for electrotechnology applications	60
UEECD0032	Produce detailed electrotechnology/utilities drawings using CAD equipment and software	60

Unit Code	Unit Title	Nominal Hours
UEECD0033	Produce products for carrying out energy sector work activities	80
UEECD0034	Produce routine tools/devices for carrying out energy sector work activities	120
UEECD0035	Provide basic instruction in the use of electrotechnology apparatus	20
UEECD0036	Provide engineering solutions for problems in complex multiple path circuits	60
UEECD0037	Provide engineering solutions for uses of materials and thermodynamic effects	100
UEECD0038	Provide solutions and report on routine electrotechnology problems	60
UEECD0039	Provide solutions to basic engineering computational problems	60
UEECD0040	Solve basic problems electronic and digital equipment and circuits	80
UEECD0041	Solve electrotechnical engineering problems	60
UEECD0042	Solve problems in ELV single path circuits	40
UEECD0043	Solve problems in direct current circuits	80
UEECD0044	Solve problems in multiple path circuits	40
UEECD0045	Solve problems in multiple path extra-low voltage (ELV) a.c. circuits	40
UEECD0046	Solve problems in single path circuits	40
UEECD0047	Supervise and coordinate energy sector work activities	40
UEECD0048	Undertake computations in an energy sector environment	120
UEECD0049	Use advanced computational processes to provide solutions to energy sector engineering problems	120
UEECD0050	Use and maintain the integrity of a portable gas detection device	20
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications	40
UEECD0052	Use routine equipment/plant/technologies in an energy sector environment	60
UEECD0053	Write specifications for computer systems engineering projects	40

Unit Code	Unit Title	Nominal Hours
UEECD0054	Write specifications for electronics and communications engineering projects	40
UEECD0055	Write specifications for industrial electronics and control projects	40
UEECD0056	Apply methods to maintain currency of industry developments	20
UEECD0057	Manage electrotechnology projects	40
UEECD0058	Observe safety practices are followed in the vicinity of isolated electrical cables	20
UEECD0059	Write specifications for electrical engineering projects	40
UEECD0060	Write specifications for electrotechnology engineering projects	40
UEECD0061	Write specifications for refrigeration and air conditioning engineering projects	40
UEECD0062	Write specifications for renewable energy engineering projects	40
UEECD0063	Write work activity reports	20
UEECD0064	Interpret, produce and modify electrotechnology drawings	60
UEECO0001	Estimate electrotechnology projects	40
UEECO0002	Maintain documentation	20
UEECO0003	Manage contract variations	40
UEECO0004	Participate in appliance servicing work and competency development activities	20
UEECO0005	Participate in business equipment work and competency development activities	20
UEECO0006	Participate in computer equipment work and competency development activities	20
UEECO0007	Participate in electronics and communications work and competency development activities	20
UEECO0008	Participate in fire protection control work and competency development activities	20
UEECO0009	Participate in instrumentation and control work and competency development activities	20

Unit Code	Unit Title	Nominal Hours
UEECO0010	Participate in refrigeration and air conditioning work and competency development activities	20
UEECO0011	Participate in security equipment work and competency development activities	20
UEECO0012	Participate in voice and data communications work and competency development activities	20
UEECO0013	Prepare specifications for the supply of materials and equipment for electrotechnology projects	40
UEECO0014	Prepare tender submissions for electrotechnology projects	60
UEECO0015	Provide quotations for installation or service jobs	20
UEECO0016	Receive and store materials and equipment for electrotechnology work	20
UEECO0017	Source and purchase material/parts for installation or service jobs	20
UEECO0018	Contribute to the commercialisation of products/applications/services	80
UEECO0019	Contribute to the conduct of a research project	80
UEECO0020	Contribute to the development of a product/application/service	80
UEECO0021	Contribute to the planning of a research project	80
UEECO0022	Participate in electrical machine repair work and competency development activities	20
UEECO0023	Participate in electrical work and competency development activities	20
UEECO0024	Participate in switchgear and control gear work and competency development activities	20
UEECO0025	Provide quotations for inspection and compliance audit services	40
UEECS0001	Administer computer networks	80
UEECS0002	Analyse and implement biometric measuring techniques and applications	120
UEECS0003	Assemble, set up and test computing devices	80
UEECS0004	Commission industrial computer systems	20

Unit Code	Unit Title	Nominal Hours
UEECS0005	Design and implement advanced routing for internetworking systems	100
UEECS0006	Design and implement multi-layer switching for internetworking systems	100
UEECS0007	Design and implement network systems for internetworking	120
UEECS0008	Design and implement remote access for internetworking systems	100
UEECS0009	Design and implement security for internetworking systems	100
UEECS0010	Design and implement wireless LANs/WANs for internetworking systems	100
UEECS0011	Design and manage enterprise computer networks	80
UEECS0012	Design embedded controller control systems	80
UEECS0013	Develop and validate biometric equipment/systems installation	120
UEECS0014	Develop computer network services	120
UEECS0015	Develop energy sector computer network applications infrastructure	80
UEECS0016	Develop energy sector directory services	80
UEECS0017	Develop industrial control programs for microcomputer equipped devices	60
UEECS0018	Develop web pages for engineering applications	40
UEECS0019	Develop, implement and test object-oriented code	140
UEECS0020	Evaluate and modify object-oriented code programs	40
UEECS0021	Install and administer UNIX/LINUX-based networked computers	80
UEECS0022	Install and configure a client computer operating system and software	40
UEECS0023	Install and configure network systems for internetworking	120
UEECS0024	Integrate multiple computer operating systems on a client server local area network	80
UEECS0025	Modify/redesign industrial computer systems	20



Unit Code	Unit Title	Nominal Hours
UEECS0026	Plan industrial computer systems projects	60
UEECS0027	Provide programming solution for computer systems engineering problems	60
UEECS0028	Select, install, configure and test multimedia components	40
UEECS0029	Set up and configure basic local area network (LAN)	40
UEECS0030	Set up, configure and test biometric devices	40
UEECS0031	Set up, create and implement content for a web server	120
UEECS0032	Support computer hardware and software for engineering applications	120
UEECS0033	Use engineering applications software on personal computers	40
UEEDV0001	Assemble and connect telecommunication frames and cabinets	60
UEEDV0002	Install aerial telecommunication cables	40
UEEDV0003	Install and connect cabling for direct access to telecommunications service	20
UEEDV0004	Install and connect data and voice communication equipment	60
UEEDV0005	Install and maintain cabling for multiple access to telecommunication services	120
UEEDV0006	Install and modify optical fibre performance data communication cabling	40
UEEDV0007	Install underground communication cables	40
UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling	40
UEEDV0009	Select and arrange data and voice equipment for local area networks	80
UEEDV0010	Select and arrange equipment for wireless communication networks	60
UEEDV0011	Set up and configure basic data communication systems	40
UEEDV0012	Set up and configure the wireless capabilities of communications and data storage devices	40
UEEDV0013	Solve problems in voice and data communications circuits	40

Unit Code	Unit Title	Nominal Hours
UEEDV0014	Test, report and rectify faults in data and voice installations	60
UEEEEC0001	Analyse the performance of wireless-based electronic communication systems	40
UEEEEC0002	Assemble and install reception antennae and signal distribution equipment	60
UEEEEC0003	Assemble and set up basic security systems	80
UEEEEC0004	Assemble and set up fixed video/audio components and systems in buildings and premises	120
UEEEEC0005	Assess electronic apparatus compliance	60
UEEEEC0006	Carry out repairs of predictable faults in video and audio replay/recording apparatus	120
UEEEEC0007	Commission electronics and communications systems	20
UEEEEC0008	Commission large fire protection systems	40
UEEEEC0009	Commission satellite and microwave communication systems	40
UEEEEC0010	Design and develop advanced digital systems	40
UEEEEC0011	Design and develop electronics/computer systems projects	40
UEEEEC0012	Design custom electronic equipment installations	120
UEEEEC0013	Design electronic printed circuit boards	40
UEEEEC0014	Design signal-conditioning sub-systems	80
UEEEEC0015	Develop basic plans for integrating security systems	40
UEEEEC0016	Develop engineering solutions to RF amplifier problems	40
UEEEEC0017	Develop engineering solutions to analogue electronic problems	80
UEEEEC0018	Develop engineering solutions to audio electronic problems	60
UEEEEC0019	Develop software solutions for microcontroller-based systems	60
UEEEEC0020	Develop solutions for air surveillance apparatus and systems	120
UEEEEC0021	Diagnose and rectify faults in air navigation circuits and systems	120

Unit Code	Unit Title	Nominal Hours
UEEEEC0022	Diagnose and rectify faults in camera circuits and equipment	60
UEEEEC0023	Diagnose and rectify faults in digital transmission circuits and systems	80
UEEEEC0024	Diagnose and rectify faults in electronic display circuits	60
UEEEEC0025	Diagnose and rectify faults in recording and replay equipment	60
UEEEEC0026	Enter and verify programs for fire protection systems	40
UEEEEC0027	Enter instructions and test wired and wireless security systems	40
UEEEEC0028	Fault find and repair complex power supplies	40
UEEEEC0029	Fault find and repair electronic apparatus	40
UEEEEC0030	Fault find and repair electronic medical equipment	120
UEEEEC0031	Fault find and repair global positioning systems	60
UEEEEC0032	Fault find and repair high-volume office equipment	120
UEEEEC0033	Fault find and repair navigation systems	60
UEEEEC0034	Fault find and repair radar apparatus and systems	120
UEEEEC0035	Fault find and repair satellite-based surveillance and observation systems	60
UEEEEC0036	Fault find and repair sonar apparatus and systems	120
UEEEEC0037	Fault find and repair telecommunication apparatus and systems	60
UEEEEC0038	Find and repair microwave amplifier section faults in electronic apparatus	40
UEEEEC0039	Install and test microwave antennae and waveguides	60
UEEEEC0040	Install commercial video/audio system components	120
UEEEEC0041	Install fire detection and warning system apparatus	40
UEEEEC0042	Install large security systems	100
UEEEEC0043	Manage computer systems/electronics projects	40

Unit Code	Unit Title	Nominal Hours
UEEEEC0044	Modify - redesign electronics and communications systems	20
UEEEEC0045	Modify digital signal processing (DSP) based sub-systems	80
UEEEEC0046	Operate and maintain amateur radio communication stations	40
UEEEEC0047	Plan large electronic projects	60
UEEEEC0048	Program and commission commercial access control security systems	60
UEEEEC0049	Program and commission commercial security closed-circuit television systems	60
UEEEEC0050	Program and commission commercial security systems	60
UEEEEC0051	Program and commission commercial video/audio systems	40
UEEEEC0052	Program and test large security systems	120
UEEEEC0053	Provide engineering solutions to air traffic control system problems	40
UEEEEC0054	Provide gate array solutions for complex electronics systems	60
UEEEEC0055	Repair basic computer equipment faults by replacement of modules/sub-assemblies	40
UEEEEC0056	Repair predictable faults in audio components	40
UEEEEC0057	Repair predictable faults in general electronic apparatus	40
UEEEEC0058	Repair predictable faults in television receivers	120
UEEEEC0059	Repair routine business equipment faults	120
UEEEEC0060	Repairs basic electronic apparatus faults by replacement of components	40
UEEEEC0061	Set up and adjust commercial radio frequency (RF) transmission and reception systems	60
UEEEEC0062	Set up and test residential video/audio equipment	40
UEEEEC0063	Solve fundamental electronic communications system problems	40
UEEEEC0064	Solve oscillator problems	40
UEEEEC0065	Solve problems in basic electronic circuits	100

Unit Code	Unit Title	Nominal Hours
UEEEEC0066	Troubleshoot amplifiers in an electronic apparatus	80
UEEEEC0067	Troubleshoot basic amplifier circuits	40
UEEEEC0068	Troubleshoot communication systems	80
UEEEEC0069	Troubleshoot digital sub-systems	80
UEEEEC0070	Troubleshoot faults in television receivers	120
UEEEEC0071	Troubleshoot fire protection systems	40
UEEEEC0072	Troubleshoot microcontroller-based hardware systems	40
UEEEEC0073	Troubleshoot professional audio reproduction components	120
UEEEEC0074	Troubleshoot resonance circuits in an electronic apparatus	80
UEEEEC0075	Troubleshoot single phase input d.c power supplies	40
UEEEEC0076	Verify compliance and functionality of fire protection system installations	60
UEEEEC0077	Verify functionality and compliance of custom electronic installations	40
UEEEL0001	Apply compliance requirements to all aspects of electrical work	20
UEEEL0002	Apply currency of safe working practices and compliance verification of electrical installations	20
UEEEL0003	Arrange circuits, control and protection for electrical installations	40
UEEEL0004	Carry out basic repairs to electrical components and equipment	40
UEEEL0005	Develop and connect electrical control circuits	80
UEEEL0006	Develop detailed and complex drawings for electrical systems using CAD systems	80
UEEEL0007	Develop detailed electrical drawings	60
UEEEL0008	Evaluate and modify low voltage heating equipment and controls	20
UEEEL0009	Evaluate and modify low voltage lighting circuits, equipment and controls	20
UEEEL0010	Evaluate and modify low voltage socket outlets circuits	20

Unit Code	Unit Title	Nominal Hours
UEEEL0011	Evaluate performance of low voltage electrical apparatus	40
UEEEL0012	Install low voltage wiring, appliances, switchgear and associated accessories	40
UEEEL0014	Isolate, test and troubleshoot low voltage electrical circuits	80
UEEEL0015	Manage large electrical projects	40
UEEEL0016	Provide advice on effective and energy efficient lighting products	40
UEEEL0017	Repair and maintain mechanical components of electrical machines	60
UEEEL0018	Select wiring systems and select cables for low voltage electrical installations	80
UEEEL0019	Solve problems in direct current (d.c.) machines	30
UEEEL0020	Solve problems in low voltage a.c. circuits	80
UEEEL0021	Solve problems in magnetic and electromagnetic devices	30
UEEEL0022	Supply effective and efficient lighting products for domestic and small commercial applications	20
UEEEL0023	Terminate cables, cords and accessories for low voltage circuits	40
UEEEL0024	Test and connect alternating current (a.c.) rotating machines	40
UEEEL0025	Test and connect transformers	40
UEEEL0026	Align and install traction lift equipment	40
UEEEL0027	Carry out low voltage electrical field testing and report findings	60
UEEEL0028	Conduct compliance and functional verification of electrical apparatus and existing circuits	40
UEEEL0029	Conduct compliance inspection of LV electrical installations with demand exceeding 100 A per phase	40
UEEEL0030	Conduct compliance inspection of single phase LV electrical installations	60
UEEEL0031	Conduct compliance inspection of special LV electrical installations	60
UEEEL0032	Conduct electrical tests on HV electrical machines	60

Unit Code	Unit Title	Nominal Hours
UEEEL0033	Conduct electrical tests on LV electrical machines	40
UEEEL0034	Conduct mechanical tests on electrical machines and components	40
UEEEL0035	Design effective and efficient lighting for public, open and sports areas	60
UEEEL0036	Design effective and efficient lighting for residential and commercial buildings	60
UEEEL0037	Design electrical installations with a low voltage demand greater than 400 A per phase	40
UEEEL0038	Design switchboards rated for high fault levels (greater than 400 A)	60
UEEEL0039	Design, install and verify compliance and functionality of general electrical installations	60
UEEEL0040	Develop compliance policies and plans to conduct an electrical contracting business	80
UEEEL0041	Develop engineering solution for synchronous machine and control problems	60
UEEEL0042	Develop engineering solutions for d.c. machine and control problems	60
UEEEL0043	Develop engineering solutions for induction machine and control problems	60
UEEEL0044	Diagnose and rectify faults in complex lift systems	40
UEEEL0045	Diagnose and rectify faults in traction lift systems	80
UEEEL0046	Find and repair faults in LV d.c. electrical apparatus and circuits	60
UEEEL0047	Identify, shut down and restart systems with alternate supplies	20
UEEEL0049	Install and maintain emergency safety systems	60
UEEEL0050	Install and replace low voltage current transformer metering	20
UEEEL0051	Investigate and report on electrical incidents and causes	60
UEEEL0052	Maintain and service traction lift systems and equipment	40
UEEEL0053	Maintain operation of electrical marine equipment and systems	60
UEEEL0054	Maintain operation of electrical mining equipment and systems	60

Unit Code	Unit Title	Nominal Hours
UEEEL0055	Overhaul and repair major switchgear and control gear	60
UEEEL0056	Place and connect electrical coils	40
UEEEL0057	Plan electrical installations with a low voltage demand up to 400 A per phase	40
UEEEL0058	Plan large electrical projects	60
UEEEL0059	Plan low voltage switchboard and control panel layouts	40
UEEEL0060	Prepare quotations for the supply of effective and efficient lighting products for lighting projects	40
UEEEL0061	Provide advice on the application of energy efficient lighting for ambient and aesthetic effect	20
UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits	60
UEEEL0063	Provide photometric data for illumination system design	80
UEEEL0064	Rewind HV three phase induction machines rated for voltages above 3.3 kV	60
UEEEL0065	Rewind HV three phase induction machines rated for voltages to 3.3 kV	60
UEEEL0066	Rewind LV direct current machines	120
UEEEL0067	Rewind single phase machines	120
UEEEL0068	Rewind three phase low voltage induction machines	120
UEEEL0069	Select and arrange equipment for special LV electrical installations	60
UEEEL0070	Select effective and efficient light sources and luminaries for given locations and designs	60
UEEEL0071	Select low voltage power factor correction equipment	40
UEEEL0072	Set up and place LV electrical apparatus and associated circuits into service	40
UEEEL0073	Verify compliance and functionality of special LV electrical installations	40
UEEEL0074	Wind electrical coils	40



Unit Code	Unit Title	Nominal Hours
UEEEL0075	Inspect, test and maintain emergency alarm systems and equipment	20
UEEEL0076	Inspect, test and maintain emergency lighting systems	30
UEEEL0077	Evaluate and report on the performance of LV machines	100
UEEEL0078	Install and commission whole current electricity meters	20
UEEEL0079	Plan and analyse LV electrical apparatus	60
UEEEL0080	Plan and analyse wiring systems, circuits, control and protection for electrical installations	100
UEEHA0004	Enter a classified hazardous area to undertake work related to electrical equipment	20
UEEHA0008	Design gas detection systems	20
UEEHA0016	Assess the fitness-for-purpose of explosion-protected equipment	40
UEEHA0017	Classify areas where a combustible dust hazard may arise	40
UEEHA0018	Classify areas where flammable gas or vapour hazards may arise	80
UEEHA0019	Conduct a conformity assessment review of explosion-protected equipment	40
UEEHA0020	Conduct detailed inspection of electrical installations for hazardous areas	40
UEEHA0021	Design explosion-protected electrical systems and installations	100
UEEHA0022	Determine the explosion-protection requirements to meet a specified classified hazardous area	40
UEEHA0023	Develop and manage periodic electrical inspection and maintenance programs for hazardous areas	20
UEEHA0024	Inspect, maintain and fit plugs/couplers for reeling, trailing and flexible cables - coal mining	80
UEEHA0025	Install explosion-protected equipment and associated apparatus and wiring systems	60
UEEHA0026	Maintain equipment associated with hazardous areas	60
UEEHA0027	Manage continuous supervision inspection of electrical installations for hazardous areas	60

Unit Code	Unit Title	Nominal Hours
UEEHA0028	Perform compliance audits of hazardous areas and related electrical installation	40
UEEHA0029	Plan electrical installations for hazardous areas	20
UEEHA0030	Repair reeling, trailing and flexible cables used in coal mining	40
UEEHA0031	Supervise repair and overhaul of explosion-protected equipment type flameproof (Ex d)	60
UEEHA0032	Supervise repair and overhaul of explosion-protected equipment type increased safety (Ex e)	60
UEEHA0033	Supervise repair and overhaul of explosion-protected equipment type intrinsically safe (Ex i)	60
UEEHA0034	Supervise repair and overhaul of explosion-protected equipment type pressurised (Ex p)	60
UEEHA0035	Supervise repair and overhaul of explosion-protected rotating machines	60
UEEHA0036	Test reeling, trailing and flexible cables and their attachments used in coal mining	40
UEEHA0037	Verify compliance of repaired reeling, trailing and flexible cables and attachments - coal mining	30
UEEHA0038	Conduct visual and close inspection of electrical installations for hazardous areas	40
UEEHA0039	Supervise repair and overhaul of explosion-protected equipment type Group III ('t')	60
UEEIC0001	Analyse complex electronic circuits controlling fluids	80
UEEIC0002	Assemble, enter and verify operating instructions in microprocessor equipped devices	20
UEEIC0003	Assist in commissioning process and instrumentation control systems	40
UEEIC0004	Calibrate, adjust and test measuring instruments	40
UEEIC0005	Configure and maintain industrial control system networks	60
UEEIC0006	Design and configure human-machine interface (HMI) networks	60
UEEIC0007	Design and use advanced programming tools, PC networks and HMI Interfacing	120
UEEIC0008	Design electronic control systems	60

Unit Code	Unit Title	Nominal Hours
UEEIC0009	Develop an electrical integrated system interface for access through a touch screen	20
UEEIC0010	Develop and test code for microcontroller devices	60
UEEIC0011	Develop electrical integrated systems	20
UEEIC0012	Develop structured programs to control external devices	40
UEEIC0013	Develop, enter and verify discrete control programs for programmable controllers	60
UEEIC0014	Develop, enter and verify programs in supervisory control and data acquisition systems	60
UEEIC0015	Develop, enter and verify word and analogue control programs for programmable logic controllers	60
UEEIC0016	Diagnose and rectify faults in a.c. motor drive systems	60
UEEIC0017	Diagnose and rectify faults in d.c. motor drive systems	60
UEEIC0018	Diagnose and rectify faults in digital controls systems	60
UEEIC0019	Diagnose and rectify faults in servo drive systems	60
UEEIC0020	Fault find and repair analogue circuits and components in electronic control systems	60
UEEIC0021	Find and rectify faults in process final control elements	40
UEEIC0022	Install instrumentation and control apparatus and associated equipment	20
UEEIC0023	Install instrumentation and control cabling and tubing	20
UEEIC0024	Plan the electrical installation of integrated systems	20
UEEIC0025	Provide solutions to extra-low voltage (ELV) electro-pneumatic control systems and drives	60
UEEIC0026	Provide solutions to fluid circuit operations	60
UEEIC0027	Provide solutions to pneumatic-hydraulic system operations	80
UEEIC0028	Provide solutions to problems in industrial control systems	60
UEEIC0029	Set up and adjust PID control loops	40



Unit Code	Unit Title	Nominal Hours
UEEIC0030	Set up and adjust advanced PID process control loops	40
UEEIC0031	Set up and configure human-machine interface (HMI) and industrial networks	60
UEEIC0032	Set up electronically controlled robotically operated complex systems	80
UEEIC0033	Set up gas analysis measuring and control instruments	20
UEEIC0034	Set up industrial field control devices	60
UEEIC0035	Set up scientific analysis measuring and control instruments	20
UEEIC0036	Set up water analysis measuring and control instruments	20
UEEIC0037	Set up weighting measuring and control instruments	20
UEEIC0038	Solve problems in density/level measurement components and systems	40
UEEIC0039	Solve problems in flow measurement components and systems	40
UEEIC0040	Solve problems in polyphase electronic power control circuits	60
UEEIC0041	Solve problems in pressure measurement components and systems	40
UEEIC0042	Solve problems in single phase electronic power control circuits	60
UEEIC0043	Solve problems in temperature measurement components and systems	40
UEEIC0044	Troubleshoot measuring and analysis systems	40
UEEIC0045	Troubleshoot medical equipment control systems	120
UEEIC0046	Troubleshoot process control systems	60
UEEIC0047	Use instrumentation drawings, specifications, standards and equipment manuals	40
UEEIC0048	Verify compliance and functionality of instrumentation and control installations	40
UEEIC0049	Manage instrumentation and control projects	40
UEEIC0050	Plan instrumentation and control projects	60

Unit Code	Unit Title	Nominal Hours
UEEIC0051	Evaluate motor drive systems and diagnose faults	60
UEERA0001	Analyse the operation of HVAC air and hydronic systems	80
UEERA0002	Analyse the psychrometric performance of HVAC/R systems	50
UEERA0003	Analyse the thermodynamic performance of HVAC/R systems	40
UEERA0004	Analyse vibration and noise in refrigeration and air conditioning systems	80
UEERA0005	Apply safety awareness and legal requirements for ammonia refrigerant	10
UEERA0006	Apply safety awareness and legal requirements for carbon dioxide refrigerant	10
UEERA0007	Apply safety awareness and legal requirements for flammable refrigerants	10
UEERA0008	Audit HVAC/R control systems for compliance with regulations and standards	60
UEERA0009	Audit energy use for commercial HVAC/R systems	40
UEERA0010	Commission complex heating, ventilation and air conditioning (HVAC) systems	80
UEERA0011	Commission complex refrigeration systems and equipment	80
UEERA0012	Commission complex refrigeration/air conditioning control systems	80
UEERA0013	Commission refrigeration/air conditioning hydronic systems	80
UEERA0014	Design ammonia refrigerated systems	40
UEERA0015	Design carbon dioxide refrigerated systems	40
UEERA0016	Design commercial refrigeration systems and select components	80
UEERA0017	Design complex air conditioning systems and select equipment	120
UEERA0018	Design complex commercial refrigeration systems and select equipment	40
UEERA0019	Design complex control systems for refrigeration or heating, ventilation, air conditioning systems	80
UEERA0020	Design complex industrial refrigeration systems and select equipment	40

Unit Code	Unit Title	Nominal Hours
UEERA0021	Design control systems for refrigeration or heating, ventilation and air conditioning systems	80
UEERA0022	Design heating, ventilation and air conditioning (HVAC) systems and select components	60
UEERA0023	Design hydrocarbon refrigerated systems	40
UEERA0024	Design hydronic systems and select equipment	80
UEERA0025	Design industrial refrigeration systems and select components	80
UEERA0026	Design mechanical ventilation/exhaust systems and select equipment	40
UEERA0027	Design secondary refrigerant systems	40
UEERA0028	Determine noise and vibration encountered in HVAC/R applications	40
UEERA0029	Develop heat exchanger design specifications	80
UEERA0030	Develop specifications and prepare drawings for HVAC/R projects	60
UEERA0031	Diagnose and rectify faults in air conditioning and refrigeration control systems	80
UEERA0032	Diagnose and rectify faults in complex air conditioning/refrigeration systems	100
UEERA0033	Diagnose faults in complex HVAC/refrigeration control systems	80
UEERA0034	Establish heat loads for commercial refrigeration and/or air conditioning applications	80
UEERA0035	Establish the basic operating conditions of air conditioning systems	20
UEERA0036	Establish the basic operating conditions of vapour compression systems	60
UEERA0037	Establish the basic operating conditions of vapour compression systems - appliances	50
UEERA0038	Establish the thermodynamic parameters of refrigeration and air conditioning systems	80
UEERA0039	Evaluate and report on building services energy management systems	80
UEERA0040	Evaluate and report on the indoor air quality of buildings	40

Unit Code	Unit Title	Nominal Hours
UEERA0041	Evaluate new and alternative technologies applicable to electrotechnology applications	40
UEERA0042	Evaluate thermodynamic and fluid parameters of refrigeration systems	100
UEERA0043	Find and rectify faults in appliance control systems and devices	60
UEERA0044	Find and rectify faults in single phase motors and associated controls	40
UEERA0045	Find and rectify faults in three phase motors and associated controls	30
UEERA0046	Install and commission ammonia refrigeration systems, components and associated equipment	20
UEERA0047	Install and commission carbon dioxide refrigeration systems, components and associated equipment	20
UEERA0048	Install and commission flammable refrigerant air conditioning and refrigeration systems	20
UEERA0049	Install and start up single head split air conditioning and water heating heat pump systems	70
UEERA0050	Install refrigerant pipe work, flow controls and accessories	60
UEERA0051	Install, commission, service and maintain air conditioning systems	80
UEERA0052	Install, commission, service and maintain low temperature systems	40
UEERA0053	Install, commission, service and maintain medium temperature systems	40
UEERA0054	Maintain microbial control of refrigeration and air conditioning systems	20
UEERA0055	Manage refrigeration and air conditioning projects	40
UEERA0056	Monitor and adjust refrigeration energy management systems	40
UEERA0057	Operate ammonia refrigeration plant	40
UEERA0058	Plan refrigeration and air conditioning projects	60
UEERA0059	Prepare and connect refrigerant tubing and fittings	40
UEERA0060	Produce HVAC/R control system diagrams	40

Unit Code	Unit Title	Nominal Hours
UEERA0061	Produce HVAC/R system design drawings	80
UEERA0062	Recover and charge refrigerants	40
UEERA0063	Recover, pressure test, evacuate, charge and leak test refrigerants - appliances	50
UEERA0064	Recover, pressure test, evacuate, charge and leak test refrigerants - split systems	60
UEERA0065	Repair and service ammonia refrigeration systems	20
UEERA0066	Repair and service carbon dioxide refrigeration systems	20
UEERA0067	Repair and service secondary refrigeration systems	20
UEERA0068	Repair and service self-contained carbon dioxide refrigeration and heat pump systems	20
UEERA0069	Resolve problems in beverage dispensers	40
UEERA0070	Resolve problems in central plant air conditioning systems	40
UEERA0071	Resolve problems in dairy refrigeration systems	20
UEERA0072	Resolve problems in hydronic systems	40
UEERA0073	Resolve problems in ice making systems	20
UEERA0074	Resolve problems in industrial refrigeration systems	20
UEERA0075	Resolve problems in post-mix refrigeration systems	20
UEERA0076	Resolve problems in refrigerated beverage vending cabinets	20
UEERA0077	Resolve problems in transport refrigeration systems	20
UEERA0078	Resolve problems in ultra-low temperature refrigeration systems	20
UEERA0079	Safely handle refrigerants and lubricants	40
UEERA0080	Select basic commercial refrigeration system equipment, components and accessories	40
UEERA0081	Select refrigerant piping, accessories and associated controls	60
UEERA0082	Select residential air conditioning system equipment, components and accessories	40



Unit Code	Unit Title	Nominal Hours
UEERA0083	Service and repair microwave ovens	40
UEERA0084	Service and repair self-contained flammable refrigerants air conditioning and refrigeration systems	20
UEERA0085	Service clothes washing machines and dryers	40
UEERA0086	Service dishwasher machines	40
UEERA0087	Service electrical heating appliances	60
UEERA0088	Service gas heating appliances	40
UEERA0089	Service refrigeration appliances	60
UEERA0090	Service room air conditioners	30
UEERA0091	Service small electrical appliances and power tools	60
UEERA0092	Solve problems in low voltage refrigeration and air conditioning circuits	60
UEERA0093	Verify functionality and compliance of appliances	20
UEERA0094	Verify functionality and compliance of refrigeration and air conditioning installations	40
UEERA0095	Recover refrigerant from stationary self-contained end of life decommissioned equipment	20
UEERA0097	Install, commission, service and maintain variable refrigerant flow air conditioning systems	40
UEERA0098	Inspect, test and repair fire and smoke control features of mechanical services systems	30
UEERE0001	Apply environmentally and sustainable procedures in the energy sector	20
UEERE0006	Conduct periodic maintenance of remote area power supply battery banks	40
UEERE0007	Conduct periodic maintenance of remote area power supply generator sets	40
UEERE0008	Conduct periodic maintenance of remote area power supply photovoltaic arrays	40
UEERE0009	Conduct periodic maintenance of remote area power supply wind generators	40

Unit Code	Unit Title	Nominal Hours
UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector	20
UEERE0015	Implement and monitor energy sector environmental and sustainable policies and procedures	20
UEERE0018	Maintain and repair remote area power generation facilities	80
UEERE0049	Apply safe work practices in the rooftop solar industry	20
UEERE0050	Identify and isolate multiple supply systems	20
UEERE0051	Apply electrical principles to renewable energy design	60
UEERE0052	Assess energy loads and uses for energy efficiency in commercial facilities	40
UEERE0053	Assess energy loads and uses for energy efficiency in industrial properties and enterprises	40
UEERE0054	Conduct site survey for grid-connected photovoltaic and battery storage systems	30
UEERE0055	Conduct site survey for off-grid photovoltaic/generating set systems	40
UEERE0056	Coordinate maintenance of renewable energy (RE) apparatus and systems	20
UEERE0057	Coordinate the design of micro-grid renewable energy systems	40
UEERE0058	Coordinate the installation, fault finding and repair of micro grid systems	60
UEERE0059	Design energy management controls for electrical installations in buildings	80
UEERE0060	Design grid-connected battery storage systems	80
UEERE0061	Design grid-connected photovoltaic power supply systems	60
UEERE0062	Design micro-hydro systems	80
UEERE0063	Design off-grid photovoltaic/generating set systems	80
UEERE0064	Design renewable energy heating systems	80
UEERE0065	Design wind energy systems	60
UEERE0066	Develop effective engineering strategies for energy reduction in buildings	60

Unit Code	Unit Title	Nominal Hours
UEERE0067	Develop engineering solutions to renewable energy (RE) problems	60
UEERE0068	Develop strategies to address sustainability issues for electrical installations	20
UEERE0069	Diagnose and rectify faults in renewable energy (RE) control systems	60
UEERE0070	Fault find and repair grid-connected photovoltaic power supply systems	30
UEERE0071	Fault find and repair off-grid photovoltaic/generating set systems to an electrical installation	30
UEERE0072	Inspect grid connected renewable energy systems	30
UEERE0073	Inspect micro grid renewable energy systems	30
UEERE0074	Inspect off-grid renewable energy systems	30
UEERE0075	Install and maintain micro hydro energy systems to power conversion equipment	40
UEERE0076	Install and maintain wind energy systems to power conversion equipment	40
UEERE0077	Install battery storage equipment power conversion equipment to grid	40
UEERE0078	Install battery storage to power conversion equipment	40
UEERE0079	Install off-grid power conversion equipment to electrical installation	30
UEERE0080	Install photovoltaic power conversion equipment to grid	30
UEERE0081	Install photovoltaic systems to power conversion equipment	60
UEERE0082	Maintain renewable energy (RE) apparatus	30
UEERE0083	Maintain safety and tidiness of remote area power supply systems	20
UEERE0084	Manage renewable energy (RE) projects	30
UEERE0085	Plan renewable energy (RE) projects	60
UEERE0086	Promote sustainable energy practices	40
UEERE0087	Provide basic sustainable energy solutions for energy management in residential premises	30

Unit Code	Unit Title	Nominal Hours
UEERE0088	Work safely with remote area power supply systems	20
UEERL0001	Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply	20
UEERL0002	Attach cords, cables and plugs to electrical equipment for connection to 1000 V a.c. or 1500 V d.c.	20
UEERL0003	Conduct in-service safety testing of electrical cord connected equipment and cord assemblies	20
UEERL0004	Disconnect - reconnect electrical equipment connected to low voltage (LV) installation wiring	60
UEERL0005	Locate and rectify faults in low voltage (LV) electrical equipment using set procedures	20
UEERL0006	Attach HV flexible cables and plugs	40
UEERL0007	Disconnect-reconnect 3.3 kV electric propulsion components of self-propelled earth moving vehicles	60
UEERL0008	Disconnect-reconnect explosion-protected appliances and control devices connected to LV installation	60
UEERS0001	Assemble and wire internal electrical rail signalling equipment	20
UEERS0002	Decommission electrical and electromechanical rail signalling from service	20
UEERS0003	Develop rail signalling system maintenance programs	20
UEERS0004	Find and repair rail signalling system faults	20
UEERS0005	Install and maintain active level crossing equipment	20
UEERS0006	Install and maintain computer-based interlocking rail systems	20
UEERS0007	Install and maintain non-vital screen-based control systems	20
UEERS0008	Install and maintain non-vital telemetry systems	20
UEERS0009	Install and maintain power-operated point actuating devices	20
UEERS0010	Install and maintain rail signalling power supplies	20
UEERS0011	Install and maintain rail track circuit leads and bonds	20
UEERS0012	Install and maintain trackside signal and train protection equipment	20

Unit Code	Unit Title	Nominal Hours
UEERS0013	Install and maintain train detection equipment	20
UEERS0014	Install and maintain vital relay interlocking systems	20
UEERS0015	Maintain electronic and microprocessor-based remote control systems	20
UEERS0016	Maintain mechanical rail signalling equipment and infrastructure	20
UEERS0017	Repair rail signalling power and control cables	20
UEERS0018	Test and commission rail power equipment	20
UEERS0019	Test copper rail signalling cables	20

## CONTACTS AND LINKS

### **Curriculum Maintenance Manager (CMM) Service**

#### **CMM Engineering Industries**

The CMM Service is provided on behalf of Higher Education and Skills.

CMM Service Executive Officers can assist with questions on payable and nominal hours.

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0479 184 251

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### **Energy, Gas and Renewables Jobs and Skills Council (JSC) - TBA**

As part of the National Industry Engagement Reforms, new Jobs and Skills Councils (JSCs) are being established. At the time of publication, the entity for the Energy, Gas and Renewables has not yet been announced. For more information see [Industry Engagement Reforms - Department of Employment and Workplace Relations, Australian Government \(dewr.gov.au\)](#)

### **National Register of VET in Australia - Training.gov.au (TGA)**

TGA is the Australian government's official National Register of information on Training Packages, qualifications, courses, units of competency and RTOs. See [training.gov.au](http://training.gov.au) for more information.

### **Australian Government - Department of Employment and Workplace Relations (DEWR)**

The Commonwealth Department is responsible for national policies and programmes that help Australians access quality vocational education and training. See [Skills and Training - DEWR](#) for more information.

### **State Government - Department of Education and Training (DET)**

DET is the State Training Authority responsible for supporting implementation of Vocational Education and Training (VET) in Victoria. See [education.vic.gov.au](http://education.vic.gov.au) for more information. (03) 9637 2000

### **National VET Regulatory Authority - Australian Skills Quality Authority (ASQA)**

ASQA is the national regulator for Australia's VET sector. Info line: 1300 701 801 See [asqa.gov.au](http://asqa.gov.au) for more information.

### **State VET Regulatory Authority - Victorian Registration and Qualifications Authority (VRQA)**

The VRQA is a statutory authority responsible for the registration and regulation of Victorian RTOs and for the regulation of apprenticeships and traineeships in Victoria. (03) 9637 2806 See [vrqa.vic.gov.au](http://vrqa.vic.gov.au)

## INDUSTRY REGULATORY BODIES

### Energy Safe Victoria

The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.

(03) 9203 9700

[info@esv.vic.gov.au](mailto:info@esv.vic.gov.au)

See [esv.vic.gov.au](http://esv.vic.gov.au) for further information.

### WorkSafe Victoria

The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.

WorkSafe needs to provide written verification before high risk work units can be added to an RTO's scope of registration. [info@worksafe.vic.gov.au](mailto:info@worksafe.vic.gov.au) See [worksafe.vic.gov.au](http://worksafe.vic.gov.au) for further information.

222 Exhibition Street,

Melbourne 3000

(03) 9641 1444 or

1800 136 089 (toll free)

[info@worksafe.vic.gov.au](mailto:info@worksafe.vic.gov.au)

See [worksafe.vic.gov.au](http://worksafe.vic.gov.au) for further information.

### Australian Refrigeration Council Ltd (ARC)

The industry Regulatory body can provide advice on licensing, legislative or regulatory requirements which may impact on the delivery of training or the issuance of qualifications in this Training Package.

Level 1, 818 Whitehorse Road

Box Hill VIC 3128

1300 88 44 83

[enquire@arctick.org](mailto:enquire@arctick.org)

See [arctick.org](http://arctick.org) for further information.

## GLOSSARY

<b>Code</b>	Nationally endorsed Training Package qualification code.
<b>Title</b>	Nationally endorsed Training Package qualification title.
<b>Unit Code</b>	Nationally endorsed Training Package unit code.
<b>Unit Title</b>	Nationally endorsed Training Package unit title.
<b>Maximum Payable Hours</b>	<p>The maximum number of hours the Victorian Government will subsidise under Skills First funding for the achievement of the minimum realistic vocational outcome of the qualification, as determined by the qualification packaging rules. The Maximum Payable Hours do not cover every possible combination of core and elective units available for a specific qualification.</p> <p>Minimum payable hours reflect a calculated minimum number of hours that could deliver a minimum realistic vocational outcome, based on efficiencies of contextualisation and integration.</p>
<b>Scope of Registration</b>	Scope of registration specifies the AQF qualifications and/or units of competency the training organisation is registered to issue and the industry training and/or assessment services it is registered to provide.
<b>Nominal Hours</b>	Nominal hours reflect the anticipated time taken to deliver and assess the outcomes of a unit of competency excluding unsupervised delivery or the time taken for repeated practical application of skills. Nominal hours are determined by the Victorian State Training Authority (DET) and are primarily developed for funding purposes in Victoria.